Product DATA

Data sheet no DS0181280 | EN
2012 | R1-4

Zone 1,2,21,22

Ex II 2 G Ex mb II T6/T5/T4
Ex II 2 D Ex mD 21 T85/100/125°C

Compact Camera EC-710 series

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Technical Specifications

Compact Camera EC-710 series

Zone 1,2,21,22
Ex II 2 G Ex mb II T6/T5/T4
Ex II 2 D Ex mD 21 T85/100/125°C

Product-name PAL	EC-710-081P	EC-710-070P	EC-710-052P	EC-710-044P	EC-710-033P	EC-710-023P	EC-710-012P
Product-name NTSC	EC-710-081N	EC-710-070N	EC-710-052N	EC-710-044N	EC-710-033N	EC-710-023N	EC-710-012N
Horizontal angle	81°	70°	52°	44°	33°	23°	12°
Vertical angle	61°	53°	39°	33°	25°	11°	9°

CCD	1/4 inch CCD Image sensor.
CCD total pixels	PAL: 795(H) x 596(V), NTSC: 811(H) x 508(V).
Minimum illumination	1,5 Lux (F1.2, 5600°K).
Resolution	470 TVL
S/N ratio	52dB (MIN) / 60dB (TYP) (AGC OFF).
Video output	1,0V p-p composite video at 75 Ohm.
Gamma correction	0,45
Gain control	AGC
White balance	ATW/AWC/Fix (zero color rolling).
White balance range	AWB, ATW(3200-10.000°K)/fix(3200°K).
Mirror function	REV./ NOR. Switchable via orange wire connected to 12V/DC.
Shock constancy	Shock and vibration resistant for usage on offshore platform.
Weight	0,44 kg, without cable.
Lensglass	Chemically hardened, toughened, tempered floatglass, 5 to 7 times stronger than ordinary glass.
Housing	Stainless steel 316L, IP68 according to IEC 60529. IP69K according EN 40050-9.
Camera bracket	Camera bracket is made of glass reinforced polyamide, survives torque test: 50 Nm at -40°C...+75°C.
Ambient temperature	T4;-40°C<+75°C, T5;-40°C<+50°C, T6;-40°C<+35°C.
Power	12V/DC +/-10%, consumption 250mA heating on, 85mA heating off. Camera must be connected to a fuse 250 mA slow blow. The breaking capacity of the fuse must be in accordance with the prospective short circuit current of the supply.
Cable	Art. no 1220110, metric marker. 5,0 meters (+/-0,04m), the cable shall be fixed mounted.
Approvals	EN 60079-18: 2009, EN 60079-0: 2009, IEC 60079-18: 2009, IEC 60079-0: 2007.
Certifiates	KEMA 03 ATEX 1554 X, IECEx KEM 09.0002X: Type code: Camera type CCC-Ex-081P or EC-710-081P mean same camera type
Green Passport	All materials are compliant to Green Passport requirements according IMO resolution MEPC.197(62) as adopted on 15 July 2011 (Maritime sector: International Maritime Organization concerning the functions of the Marine Environment Protection Committee)

EC Declaration of conformity
According to Annex XB, ATEX guidelines 94/9/EC.
Name manufacturer: Orlaco Products BV. Address manufacturer: A. Plesmanstraat 42, 3771 MN, Barneveld, The Netherlands, Europe.
Declares that the product: Product name: [Compact Camera XX° Ex-M] [Model number(s): 0181**0] comply with the following products specifications:
EN 60079-18: 2009, EN 60079-0: 2009, IEC 60079-18: 2009, IEC 60079-0: 2007.
Extra information:
Products are tested as independent units. Contacts The Netherlands: Mr. B.J. Antink, Tel.: +31 342 404555
Notified body CE0344: Kema Quality BV, Utrechtseweg 310, 6812 AR ARNHEM, The Netherlands, Europe.

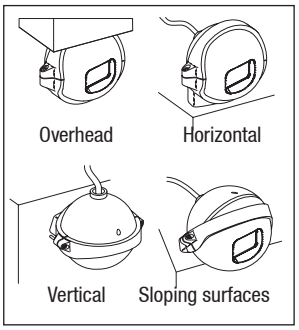
Camera must be connected to a fuse 250 mA slow blow.

NOTE: The free end of the permanently connected, unterminated cable is to be connected in an appropriate way, e.g. in a suitable Ex e or Ex d junction box.

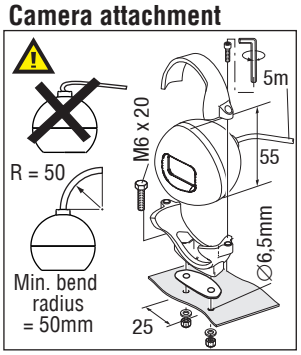
NOTE: Electrical connections shall only be done by Ex qualified engineers following the latest ATEX regulations. We accept no liability for mistakes, faults or damages due to wrong voltage connection. Zenerbarriers and fuses are not included,and should be applied by an installer.

Installation

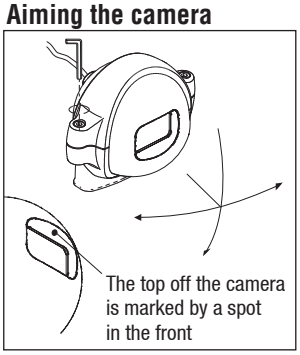
Universal camera bracket



Camera attachment



Aiming the camera

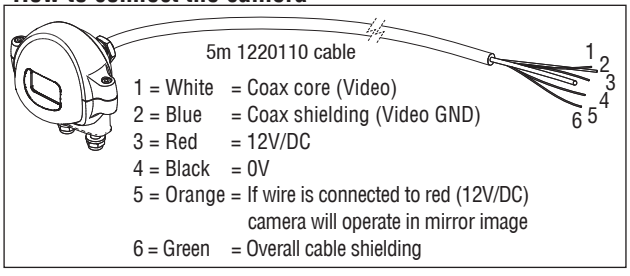


Date/serial number marking see camera label:

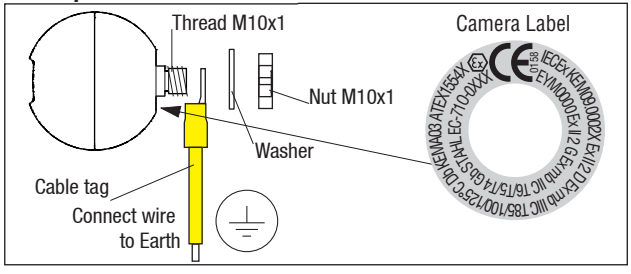
EYMXXXX

E = Prefix = Ex
Y = Year; 1st digit: 2011 = B, 2012 = C.
M = Month; 2d digit: January = A, December = M. (NB: Letter "i" is not used).
X = Follow-up number, restarted every month; 4 digits.

How to connect the camera


5m 1220110 cable
1
2
3
4
5
6
1 = White = Coax core (Video)
2 = Blue = Coax shielding (Video GND)
3 = Red = 12V/DC
4 = Black = 0V
5 = Orange = If wire is connected to red (12V/DC) camera will operate in mirror image
6 = Green = Overall cable shielding

Earth point



All data are subject to change without any notice. All dimensions are for commercial purpose only.
The camera/display systems comply with the latest CE, ADR, EMC and mirror-directive regulations.
All products are manufactured in accordance with the ISO 9001 quality management system, ISO 14001 environmental management systems and all Ex products with the IECEx scheme and ATEX directives.

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